

Application No. 09/821,515  
Page 2

### IN THE SPECIFICATION

*Please amend paragraph 0018 as follows:*

Figure 3 illustrates a system having an embodiment of the invention. System 300 comprises CPU 120, memory 110, north bridge 130, hub link 140, and south bridge 135. South bridge 135 is comprised of USB host controller 150 having root hubs 151, 152 and 153. In one embodiment of the invention, USB load balancing circuit 310 is disposed between USB host controller 150 and root hubs 151-153. Root hubs 151-153 may be coupled to USB devices 170-175 via signals on USB buses 154-159 via USB load balancing circuit 310. USB load balancing circuit 310 includes a plurality of registers 311 (R<sub>1</sub>-R<sub>N</sub>).

*Please amend paragraph 0021 as follows:*

Figure 5 illustrates an embodiment of the invention having USB load balancing circuit 310 illustrated in further detail. In one embodiment, USB load balancing circuit 310 comprises switching groups 520, 530, 540, 550, 560 and 570. Switching groups 520, 530, 540, 550, 560 and 570 are controlled by registers ~~(not shown)~~ 311 in one embodiment of the invention. ~~The~~ Registers 311 are software/BIOS controllable in one embodiment of the invention. USB signals on USB buses 154-159 are dynamically routed to particular USB ports based on states of registers 311.

*Please amend paragraph 0022 as follows:*

In one embodiment of the invention, the register states are retained even when alternating current (AC) power is removed from the device, such as a PC. In one embodiment of the invention the switching of each port has a unique default state in an event when controlling registers 311 do not yet have information. In one embodiment of the invention, a software driver or software utility can be used to program the registers used by load balancing circuit 310. One should note that any number of processes and/or algorithms can be used to program the registers 311 used by load

Application No. 09/821,515  
Page 3

*(3)*  
balancing circuit 310. In another embodiment of the invention, the Basic Input/Output System (BIOS) of the PC or device system is used to program the registers 311. A BIOS is the program which starts up a computer device and communicates between devices in the computer system (such as a hard drive and graphics card) and the operating system. BIOS is normally stored in an erasable programmable read only memory (EPROM) chip.

*Please amend paragraph 0026 as follows:*

*(4)*  
In one embodiment, logic determines which USB devices are allowed to connect to the same USB root hub and which USB devices are not allowed to connect to the same USB hub. Then the available USB root hubs are allocated USB devices according to the allowable connections. After the allocation of USB devices is determined, block 650 writes information to registers 311 used by load balancing circuit 310. ~~The~~ Registers 311 control switching of USB root hubs to available USB ports. After the switching occurs, process 600 determines if any additional USB devices have been attached to a USB port. In one embodiment of the invention process 600 dynamically switches USB devices between USB root hubs before the device is placed in use so as to avoid interrupting processes such as writing to a USB hard drive, writing to a CDRW, printing a document, etc.

*Please amend paragraph 0032 as follows:*

*(5)*  
In one embodiment of the invention process 700 continues with block 750, which determines whether the USB devices attached are currently in use. If the attached USB devices are currently in use, process 700 continues with block 710. If the USB devices that are to be reallocated are not in use, then process 700 continues with block 760. Block 760 writes information to registers 311 used by USB load balancing circuit 310. Process 700 then continues with block 770. Block 770 switches the USB ports to the allocated USB root hub based on device use and bandwidth consumption.

Application No. 09/821,515  
Page 4

*Please amend paragraph 0033 as follows:*

---

*A 6*  
In one embodiment of the invention process 700 dynamically switches available USB ports when the USB devices to be switched are not currently being used. This is to prevent situations when interruption of a device would cause the loss of data or be inconvenient (e.g., printing documents, writing to hard drives, etc.). In another embodiment, process 700 writes the information to registers 311 used by USB load balancing circuit 310 to be used upon restart of the computer if the same devices are attached to USB ports.

---